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REMARKS

In response to the Advisory Action of November 29, 2006, Applicant presents the foregoing amendments to the claims and remarks in connection with a Request for Continued Examination and a Request for a One Month Extension of Time. Upon considering these amendments and remarks, it is believed that the Examiner will agree that all claims patentably distinguish over the cited prior art and should be formally allowed.

Product claim 1 and method claim 13 stand rejected as obvious based on the combination of Oleszczuk et al. and Lickfield et al. as primary references, in further view of Welch et al. According to the Examiner, neither of the primary references "mention at least one adjacent additional layer of different fiber formulation" (Office Action, p. 3, ¶2), as expressly required by these claims. Although these primary references broadly mention that that the layers of the disclosed article "may be directly thermally bonded," it remains the case that neither teaches two layers of wet processed mat directly bonded together, as the claims at issue also require. Indeed, the cited passages from the Oleszczuk et al. and Lickfield et al. references specifically teach bonding the wet laid layers 14, 16 with the intermediate meltblown layer 12 sandwiched between them, rather than to each other. Accordingly, it is a fact that these "primary" references do not teach direct bonding of any wet laid layers 14, 16 together.

In an effort to supply this missing teaching, the secondary Welch et al. reference is cited for the proposition that it is "known in the nonwoven laminate art to use an additional nonwoven layer with a different fiber formulation from the adjacent layer, so that the surface is more aesthetically pleasing to the touch and more comfortable to the user" (final Office Action, p. 3, ¶3). Even assuming this statement is true, absolutely no teaching, motivation or suggestion of providing directly bonded layers of wet processed mat with different fiber formulations is identified anywhere in Welch et al. or otherwise in the prior art. Indeed, such an arrangement is contraindicated by the Oleszczuk et al. and

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Lickfield et al. references, since sandwiching a meltblown microfiber layer 12 between the two outer layers 14, 16 is a critical teaching of each of them. In other words, the outer layers 14, 16 are neither of different fiber formulations nor directly bonded together, as the claims under rejection require.

Welchel et al. simply does not supply the critical missing teaching of two layers of wet processed mat, as claimed, having different fiber formulations directly bonded together. As Applicant previously pointed out, even if the "second top layer" 105 identified in Welchel et al. does have a "different fiber formulation," it is neither wet processed, nor is it directly bonded to another wet processed layer, as expressly required by claims 1 and 13.

In response to Applicant's argument in this regard, the Examiner contends that "it is not necessary to rely on Welchel to teach the wet processing of the layers because Oleszczuk and Lickfield already disclose that additional 'supporting' (wet processed mat) layers may be added to the composite article" (final Office Action, p. 7, ¶2) (emphasis added). Applicant respectfully submits that this statement is simply not accurate, since Oleszczuk et al. and Lickfield et al. do not in any of the passages cited by the examiner disclose that an additional "wet processed mat" layer may be added to the article, let alone directly bonded to another wet processed mat layer as required by the claims at issue. While these references include an omnibus statement regarding the possible addition of unspecified layers in an unspecified manner in an effort to meet the specific terms of the claims at issue, this hardly qualifies as the requisite substantial evidence necessary to support a proper obviousness rejection. *See In re Zurko*, 59 USPQ2d 1693 (Fed. Cir. 2001) (recognizing the need for "some concrete evidence in the record in support of" findings of obviousness). Stated another way, no "reasonable mind might accept as adequate" the teachings of Oleszczuk et al. and Lickfield et al. as to the addition of various additional layers as supporting the conclusion advanced by the Examiner that it would as a result of the cited

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teachings be obvious to directly bond a wet processed mat of a different fiber formulation to either of the layers 14, 16 disclosed in these references.

Likewise, the requisite substantial evidence does not support the ultimate conclusion reached as to the obviousness of the claimed inventions. The Examiner concludes based on the teachings of the cited references that a skilled artisan would have found it obvious to "directly bond an additional wet processed bicomponent staple fiber mat supporting layer, with a different fiber formulation . . . because the additional wet processed bicomponent staple fiber mat supporting layer would allow the surface to be more aesthetically pleasing to the touch and more comfortable to the user" (Office Action, p. 3, ¶1).

The difficulty with this position is that no evidence in the record supports the conclusion that adding a wet processed mat layer having a different fiber formulation would produce the stated result. As implicitly admitted by the Examiner, Welch et al. does not mention any wet processed mat layer directly bonded to another wet processed mat layer of the type claimed having a different fiber formulation, so it cannot support the conclusion reached. Moreover, the Examiner expressly admits that Oleczuk et al. and Lickfield et al. "do not appear to specifically mention at least one adjacent additional layer of different fiber formulation" (*Id.*). The Examiner's conclusion is thus a *non sequitur*, since the fact that Welch et al. teaches that a different fiber diameter or denier may create a surface more "aesthetically more pleasing to the touch" would not in any way motivate a skilled artisan to directly bond two wet processed mats having different fiber formulations together as required by the claim.

As noted above, the assertion is also made that "applicant has not shown, or attempted to show, that all wet processing steps result in a mat that is patentably distinct from a mat that is not wet processed" (Office Action, p. 7, ¶2). This statement is troubling for several reasons. First of all, none of the claims at issue require any "wet processing steps" whatsoever. Rather, they require a wet

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processed mat as a structural element of the claimed invention. The remarks made by the examiner in this regard suggest that express structural limitations of the claims (namely, wet processed mats) were ignored in the patentability analysis, which is improper. *See* MPEP 2143.03 ("All words in a claim must be considered in judging the patentability of that claim against the prior art.").

Perhaps more troubling is the attempt to shift the burden of proving patentability of the invention to the Applicant, despite the lack of a *prima facie* case of obviousness. Citation is made in the final Action to *In re Marosi* 218 USPQ 289 (Fed. Cir. 1983), which decision allegedly supports shifting the burden of proof to the Applicant to establish patentability. However, this holding is inapposite to the present situation, and does not in any way justify the Examiner's position.

Specifically, in *Marosi*, the product claims at issue were "directed to a zeolite manufactured by the claimed process," but which zeolite was otherwise identical to that known in the art. *Id.* at 291. In upholding the rejection of the product claims, the Court held that "[w]here a product-by-process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product." *Id.* at 293.

In stark contrast to the facts in *Marosi*, the present claims recite a liner/insulator having multiple layers of wet processed mat bonded together. The claims at issue are not "product-by-process" claims at all, but rather recite products in structural terms and methods of manufacture. With respect to the product claims in particular, limitations such as "wet processed" when applied to claim elements such as mats have long been held to qualify as structural, rather than process limitations. *See 3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1371-74 69 USPQ2d 1050 (Fed. Cir. 2003) (holding that "multiple embossed patterns" did not import a process limitation into a

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structural claim); *Hazani v. U.S. International Trade Commission*, 44 USPQ2d 1358 (Fed. Cir. 1997) (holding that the limitation "chemically engraved" in a claim "describes the product more by its structure than by the process used to obtain it."); *In re Garnero*, 412 F.2d 276, 278-79, 162 USPQ 221, 223 (CCPA 1969) ("... the recitation of the particles as 'interbonded one to another by interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural, rather than process, limitations"). Thus, the burden-shifting authorized by *In re Marosi* in the case of "product-by-process" claims and relied upon in attempting to force the Applicant to establish patentability of the claimed inventions is simply inapplicable to the present situation.

The Examiner's position also completely ignores the advantages of using wet processed layers of mat, as discussed in the Applicant's specification. Specifically, Applicant upon being sworn avers in the specification that:

The wet process is preferred over various dry laid processes because the wet process provides an insulating layer with a more consistent weight per unit area. The wet process also provides more intimate mixing of the fiber blends and more random fiber orientation. Compared with dry-laid processes, the wet process is capable of high production rate, thus providing a less costly insulating layer.

Since the specification filed under oath explains the advantages of using a wet processed mat, it is thus simply not true "that applicant has not shown, or attempted to show, that all wet processing steps result in a mat that is patentably distinct from a mat that is not wet processed." Quite the contrary, it is the Examiner who fails to provide any substantial evidence establishing that the layers shown in Welch et al. are patentably indistinct from the claimed wet processed mat layers, as required to establish a *prima facie* case of obviousness.

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Turning for a moment to method claim 13 alone, the case for patentability over the cited references is even more compelling. Besides providing two layers of wet processed mat of different fiber formulations, this claim specifically requires the step of "applying sufficient heat and pressure to said first and second layers of mat to bond said first layer and said second layer directly together and form said liner/insulator." As admitted by the Examiner, the primary references do not in any way teach directly bonding layers of wet processed mat as claimed. Hence, they cannot possibly teach or suggest the step of "applying heat and pressure" to two such layers in order to bond them. Even if it is presumed for the sake of argument that Welch et al. teaches adding a layer of mat as claimed, it does not in any way teach or suggest directly bonding two layers of wet processed mat having different fiber formulations using heat and pressure. Accordingly, even if the teachings of the three references are combined, they would in no way disclose all limitations of process claim 13.

In final analysis, none of the three references cited teach or suggest the inventions of claims 1 and 13 (namely, two wet processed mat layers having different fiber formulations that are directly bonded together). Such a teaching or suggestion is undoubtedly a critical requirement of a *prima facie* case of obviousness. In view of this missing teaching, it also cannot be the case that a skilled artisan reviewing these references would in any way be compelled or motivated to modify the corresponding wet-laid layers 14, 16 of the primary references to have different fiber formulations and also to be directly bonded. Accordingly, there is simply no motivation to combine the references as proposed, which of course is a further crucial requirement of a *prima facie* case of obviousness. Therefore, claims 1 and 13 as well as claims 2-5, 9-12, 14-15 and 19-22 dependent thereon should be formally allowed.

Regardless of their dependency on an allowable base claim, the rejections made also disregard the requirements of several of the dependent claims. For instance, dependent claims 2 and 14 require a third layer of wet processed mat

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comprising thermoplastic polymer staple fibers and thermoplastic bicomponent fibers. None of the three cited references disclose three layers comprising bicomponent fibers, with two of the layers being directly bonded together and having different fiber formulations. Again, it is admitted that neither Oleszczuk et al. nor Lickfield et al., "mention at least one adjacent additional layer of different fiber formulation," and both fail to disclose a third layer of wet processed mat including bicomponent fibers. Welch et al. does not disclose any third layer of bicomponent fibers. Accordingly, neither these references nor any other substantial evidence in the record teaches or suggests the limitations of dependent claims 2 or 14, which means a *prima facie* case of obviousness is lacking with respect to these claims for this additional reason.

With regard to claims 6-8 and 16-18, Oleszczuk et al. and Lickfield et al. fail to teach or suggest a liner/insulator including first and second layers of wet processed mat directly bonded together, wherein the first and second layers have different fiber formulations. Welch et al., as described above, does not supply this missing teaching, either, and Insley does nothing to address this shortcoming of the other references. Also, the Examiner's stated reason for making the combination ("successfully practicing the invention") does not establish the requisite motivation for arriving at the claimed inventions. Accordingly, a *prima facie* case of obviousness is lacking with respect to claims 6-8 and 16-18.

As for claim 23, which stands rejected as obvious based on the teachings of five different references, the Oleszczuk et al., Lickfield et al., and Welch references fail to teach or suggest a liner/insulator including first and second layers of wet processed mat directly bonded together where those first and second layers have different fiber formulations. Bansal et al. and Malaney do nothing to address this shortcoming of the other references. Accordingly, claim 23 patentably distinguishes over the cited art and should also be allowed.

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As for dependent claim 24, the Examiner contends that its terms are met by the three references cited against claim 1 because "the first and second layers have different fiber compositions because one layer is composed of fibers with a small diameter while the other layer is composed of fibers with a larger diameter" (final Office Action, p. 8, ¶2). Although not made clear, it is presumed that the Examiner is relying on the Welch et al. reference in support of this statement. Regardless, the statement made ignores the plain and ordinary meaning of the term "composition," which would be understood by an artisan skilled in the chemical arts as meaning "[t]he elements or compounds making up a material or produced from it by analysis."¹ This ordinary meaning is entirely consistent with that accorded by Applicant's specification, which describes the fibers of one layer 4 as possibly comprising polyolefins and polyacetate, with the fibers of the other layer 2 including natural fibers such as hemp and kenaf. In contending that the different diameters of Welch et al. qualify as different "fiber compositions," the Examiner improperly construes the claim so as to alter the ordinary meaning of the term "composition," contrary to what would be understood by a skilled artisan. See *In re Cortright*, 165 F.3d 1353, 1358, 49 USPQ2d 1464 (Fed. Cir. 1999) ("Although the PTO must give claims their

¹ See, e.g., *McGraw-Hill Dictionary of Scientific and Technical Terms* (5th Ed., 1994):

composition [CHEM] The elements or compounds making up a material or produced from it by analysis. [GRAPHICS] The act of composing or combining type for printing, either by hand or by machine. [MATH] 1. The composition of two mappings, f and g , denoted $g \circ f$, where the domain of g includes the range of f , is the mapping which assigns to each element x in the domain of f the element $g(y)$, where $y = f(x)$. 2. See addition. [MECH] The determination of a force whose effect is the same as that of two or more given forces acting simultaneously; all forces are considered acting at the same point. { /kəm·pə'zish·ən }

A myriad of CAFC decisions have relied on this dictionary as authoritative for the meaning of terms used in patent claims. See, e.g., *Masco Corp. v. U.S.*, 64 USPQ2d 1182 (Fed. Cir. 2002) (defining "drive"); *Transclean Corp. v. Bridgwood Services, Inc.*, 62 USPQ2d 1865 (Fed. Cir. 2002) (defining "resilience"); *CCS Fitness, Inc. v. Brunswick Corp.*, 62 USPQ2d 1658 (Fed. Cir. 2002) (defining "member"); *NeoMagic Corp. v. Trident Microsystems, Inc.*, 62 USPQ2d 1482 (Fed. Cir. 2002) (defining "coupling"); *Durel Corp. v. Osram Sylvania, Inc.*, 59 USPQ2d 1238 (Fed. Cir. 2001) (defining "oxide").

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broadest reasonable interpretation, this interpretation must be consistent with the one that those skilled in the art would reach.") (emphasis added).

Apparently recognizing the shortcoming of Welch et al. in this regard, the Examiner goes on to contend that Oleszczuk et al. and Lickfield et al. "each disclose that at least one of the outer webs may be treated with a treatment agent to render any one of a number of desired properties to the fabric" (Office Action, p. 8, ¶2). This assertion, even if true, does not support the rejection of claim 24 on obviousness grounds for several reasons. First of all, the two "webs" 14, 16 at issue in Oleszczuk et al. and Lickfield et al. are not directly bonded together, and in fact these references teach away from such an arrangement by requiring an intermediate layer 12. Thus, even if the webs 14, 16 sandwiching an intermediate layer 12 may include "treatment agents," this *per se* does not in any way meet the terms of claim 24.

Secondly, no evidence in the record establishes that applying a "treatment agent" in the manner suggested would make the fiber composition different in the layers. In other words, it has not been shown that the "elements or compounds" making up the fibers of each layer 12, 16 would change, even if the treatments mentioned in the references were applied in the manner suggested. Indeed, the Examiner expressly admits that Oleszczuk et al. and Lickfield et al. "fail to mention at least one adjacent additional layer of different fiber formulation" (Office Action, p. 3, ¶2), which means that the terms of claim 24 cannot possibly be met by either reference. In the absence of such a showing based on the requisite substantial evidence, the invention of claim 24 as properly construed cannot be considered obvious.

Finally, Applicant presents new claim 25 for consideration. This claim reads on a liner/insulator comprising first, second and third layers of wet processed mat directly bonded to each other, wherein the first, second, and third layers comprise thermoplastic polymer staple fibers and thermoplastic bicomponent fibers. As previously noted, none of the three cited references

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disclose using three layers including bicomponent fibers, with the layers being directly bonded together. Both Oleszczuk et al. and Lickfield et al. fail to disclose a third layer of wet processed mat including bicomponent fibers. Welch et al. does not disclose any third layer of bicomponent fibers, period, and indeed specifically teaches that one of the layers must consist solely of cellulosic fibers (see col. 4, lines 36-39). Accordingly, none these references nor any other substantial evidence in the record teaches or suggests the limitations of new claim 25.

In summary, it is believed that all pending claims patentably distinguish over the prior art. Upon careful review and consideration it is believed the Examiner will agree with this proposition. Accordingly, the issuance of a formal Notice of Allowance is earnestly solicited. Any fees required in connection with this submission may be debited to Deposit Account 50-0568.

Respectfully submitted,

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